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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,835	09/24/2003	Steven J. Mastrianni	YOR920030224US1	4425

David Aker  
23 Southern Road  
Hartsdale, NY 10530

7590

06/29/2007

EXAMINER
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ARMSTRONG, ANGELA A

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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06/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/669,835

Applicant(s)

MASTRIANNI ET AL.

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 21, 41, 43, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Resnick (US Patent No. 6,690,800).
3. Resnick discloses a method and apparatus for communication operator privacy. Regarding claims 1, 21, 41, 43, and 62, Resnick discloses a method for masking speech (Figure 16; col. 7, lines 33-60; col. 8, lines 33-59) generating an electrical signal representative of the speech (118); using said electrical signal to provide an audio signal which cancels the speech (118, 119); providing a speech masking signal to mask any speech not canceled (125).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 2-3, 6, 9-20, 22-23, 26, 29-39, 42, 44-45, 48-49, and 51-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnick in view of Hillis et al (US Patent No. 7,184,952).

6. Regarding claims 2, 22, and 44, Resnick does not teach the speech masking signal is supplied by a babble generator. Hillis discloses a method and system for masking speech, which produces an obfuscated speech signal that is used to mask a stream of speech (col. 5, line 18 to col. 6, line 36) and teaches the system is advantageous in enhancing the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Resnick to implement masking the speech with an obfuscated speech signal, as suggested by Hillis, for the purpose of enhancing the privacy of the transmitted speech, as suggested by Hillis.

7. Regarding claims 3, 23, and 45, Resnick does not teach the speech masking signal is produced by rearranging the speech so that it is not intelligible. Hillis discloses a method and system for masking speech which produces an obfuscated speech signal that is used to mask a stream of speech (col. 5, line 18 to col. 6, line 36) and teaches the system is advantageous in enhancing the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Resnick to implement masking the speech with an obfuscated speech signal, as suggested by Hillis, for the purpose of enhancing the privacy of the transmitted speech, as suggested by Hillis.

8. Regarding claims 6, 26, and 48, Resnick does not disclose the speech masking signal is produced by reading out digital representations of signals disruptive to the understanding of speech form a memory and converting the digital representations to said speech masking signal.

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Hillis discloses a method and system for masking speech which produces an obfuscated speech signal that is used to mask a stream of speech (col. 5, line 18 to col. 6, line 36), in which speech or signal segments are selected and retrieved from a recent history of speech and signal segments (col. 4, line 30 to col. 5, line 8) and teaches the system is advantageous in enhancing the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Resnick to implement masking the speech with an obfuscated speech signal generated from previously stored speech or signal segments, as suggested by Hillis, for the purpose of enhancing the privacy of the transmitted speech, as suggested by Hillis.

9. Regarding claims 9-11, 29-31, and 50-52, Resnick does not disclose the speech masking signal is produced by sampling portions of the speech and providing the portions in reverse order. Hillis discloses a method and system for masking speech which produces an obfuscated speech signal that is used to mask a stream of speech (col. 5, line 18 to col. 6, line 36), in which speech or signal segments are sampled and then selected and retrieved randomly or via a classification and identification procedure dependent upon frequency, from a recent history of speech and signal segments (col. 4, line 30 to col. 5, line 8) and teaches the system is advantageous in enhancing the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Resnick to implement masking the speech with an obfuscated speech signal generated from previously stored sampled speech or signal segments, as suggested by Hillis, for the purpose of enhancing the privacy of the transmitted speech, as suggested by Hillis.

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10. Regarding claims 12-19, 32-39, and 54-61, Resnick does not disclose the speech masking signal is produced by sampling portions of the speech and providing the portions with a predetermined time delay. Hillis discloses a method and system for masking speech which produces an obfuscated speech signal that is used to mask a stream of speech (col. 5, line 18 to col. 6, line 36), in which speech or signal segments are sampled and then selected and retrieved randomly or via a classification and identification procedure dependent upon frequency, and provided on a variety of time scales (col. 4, line 30 to col. 5, line 8) and teaches the system is advantageous in enhancing the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Resnick to implement masking the speech with an obfuscated speech signal generated from previously stored sampled speech or signal segments, as suggested by Hillis, for the purpose of enhancing the privacy of the transmitted speech, as suggested by Hillis.

11. Regarding claims 20 and 42, Resnick does not specifically teach the masking signal is provided only when speech is present. Hillis discloses implementing the masking only during moments of active conversation (col. 6, lines 46-50). It would have been obvious to one of ordinary skill at the time of the invention to implement masking only during moments of active conversation, as suggested by Hillis, for the purpose of providing the masking processing only when needed so as to minimize unnecessary processing.

12. Claims 4-5, 24-25, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnick in view of McCalmont (US Patent No. 4,195,202).

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13. Regarding claims 4-5, 24-25, and 46-47, Resnick does not specifically teach the speech masking signal is provided by pitch inverting the speech. McCalmont discloses a voice privacy system, for enhancing the privacy of a transmission by disguising the amplitude characteristics and cadence content of transmitted voice signals, wherein portions of the signals are frequency inverted, delayed in time, and recombined with other signals to produce a composite signal for transmission to a remote receiver (col. 4, line 27 to col. 6, line 56). McCalmont specifically teaches the system provides an improved voice privacy system that enhances the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been obvious to one of ordinary skill at the time of the invention to implement producing the masking signal via pitch inverting the speech, as taught by McCalmont, for the purpose of enhancing the privacy of transmitted voice signals, as suggested by McCalmont.

14. Claims 7-8, 27-28, and 49-50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Resnick in view of Hillis et al (US Patent No. 7,184,952) and further in view of McCalmont (US Patent No. 4,195,202).

15. Regarding claims 7-8, 27-28, and 49-50, Resnick and Hillis do not specifically teach the digital representations used in producing the masking signal are in the form of pulse code modulation. McCalmont discloses a voice privacy system, for enhancing the privacy of a transmission by disguising the amplitude characteristics and cadence content of transmitted (pulse code modulated or adaptive pulse code modulation) voice signals (col. 4, line 27 to col. 6, line 56). McCalmont specifically teaches the system provides an improved voice privacy system that enhances the privacy of transmitted voice signals (col. 2, lines 37-43). It would have been

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obvious to one of ordinary skill at the time of the invention to implement producing the masking signal via pulse code modulated or amplitude pulse code modulated data, for the purpose of enhancing the privacy of transmitted voice signals, as suggested by McCalmont.

### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Krause (US Patent No. 4,914,706).

Wildi (US Patent No. 3,879, 578).

Wittke et al (US Patent No. 6,952,474).

Bruckner et al (US Patent No. 3,978,288).

Bradford et al (US Patent No. 7,088,828).

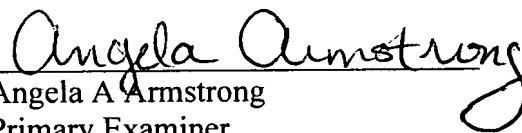
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
June 12, 2007